



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Carroll County BOE

Prepared By:
Jim Strong
MFC

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-02-15

Plan Type:
Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: S16-T16N-R5E

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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**MISSISSIPPI FORESTRY COMMISSION
FOREST STEWARDSHIP MANAGEMENT PLAN**

LANDOWNER INFORMATION

Name: Carroll County BOE
Mailing Address: P O Box 256
City, State, Zip: Carrollton, MS 38917
Country: United States of America
Contact Numbers: Home Number:
Office Number: 662-237-9276
Fax Number:

E-mail Address:
Social Security Number (optional):

FORESTER INFORMATION

Name: Jim Strong , Service Forester
Forester Number: 00898
Organization: MFC
Street Address: P O Box 95
City, State, Zip: Carrollton, MS 38917
Contact Numbers: Office Number: 662-237-6732
Fax Number:
E-mail Address: jstrong@mfc.state.ms.us

PROPERTY LOCATION

County: Carroll Total Acres: 659 Latitude: -89.79 Longitude: 33.25
Section: 16 Township: 16N Range: 5E

DISCLAIMER

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

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OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone

PROPERTY DESCRIPTION

General Property Information

This section of 654 acres is located in the most Southern part of Carroll County approximately 1 mile north of the Carroll and Holmes county line. The West Bound Lane of Interstate 55 is the North West corner of the section. Access to the tract is by way of County Gravel Road # 87. All land is classified as Forest Land and is suited to growing pine sawtimber.

Water Resources

The drainages of this section are in the Black Creek Watershed. Black Creek is a tributary of the Big Black River Basin. The objective is to protect, preserve and enhance all water sources and drainages on or transecting the property. Mississippi Best Management Practices will be implemented during all aspects of the management of this property to minimize the impact on water resources.

Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of this property.

If any threatened and /or endangered species are discovered, immediate management procedures will be applied to protect these sensitive natural resources for future generations.

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Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property: Smithdale-Providence-Lexington Association. A description of this soil is found in the Soil Type Section of this plan.

Archeological and Cultural Resources

No Archeological and Cultural Resources were identified during a reconnaissance of the property.

If any Archeological and/or Cultural Resources are discovered during the management of this property, immediate management practices will be applied.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A vigorous stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

The Mississippi Forestry Commission will establish and maintain all firebreaks around the property and other forest management areas on the property. These firebreaks will

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help to protect your property from wildfires. All firebreaks will be established and maintained according to Mississippi Best Management Practices.

Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

Boundary Lines

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

Note: Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

Aesthetics

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the road and adjacent to the home site, planting wildflowers along the road, and trees with attractive fall and spring color along the drive and near the home site.

Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

Wildlife Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management will focus on providing food, cover, water, and space to facilitate the target species.

Environmental Education

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities.

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Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

The entire section is leased out to one hunting club which focuses their hunting on deer and turkey. They maintain firebreaks and food plots throughout the section for the native wildlife.

Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

Recreation

According to landowner objectives the recreational use of the property could prove to be an avenue for personal enjoyment or for generating income. An evaluation of your property should be conducted and a plan developed to accomplish your specific goals for recreational activities on your property.

SOIL TYPES

9F

The Smithdale component makes up 47 percent of the map unit. Slopes are 12 to 40 percent. This component is on hillslopes. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The Providence component makes up 27 percent of the map unit. Slopes are 12 to 15 percent. This component is on uplands. The parent material consists of silty loess over sandy marine deposits. Depth to a root restrictive layer, fragipan, is 18 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

STRATA

Strata 1

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Strata Description

This strata consists of the following stands: # 1, # 4, # 7, # 8, # 10, # 11, # 13, # 16, and # 17 for a total of 417.86 acres. This well stocked loblolly pine plantation was hand planted in January 1996 and is mainly pulpwood and chip-n-saw size timber with an average DBH of approximately 7.8 inches and has approximately 195 trees to the acre with an average merchantable height of 39 feet tall. There is approximately 132 square feet of basal area and 113 tons to the acre at the present time.

At the present time, there is an active timber sale thinning contract with McGee Timber Inc. for \$5.62 ton for pine pulpwood to row thin the entire strata to an average of 85 square feet per acre. Corridors 16 feet wide will be harvested and utilized as haul and skid rows. The width between corridors will be 40 feet. Tree designated for sale are those 5", 6" and 50% of the 7" dbh size trees not needed to form an average basal area of 85 square feet.

Stand Recommendations

This loblolly pine stand will be managed on a 35 year rotation using sound forestry management practices. The strata will be thinned to lower the basal area which will create more sunlight for a period of time to the forest floor which will create more wildlife food and cover for the deer, turkey and other native wildlife.

This strata will be divided into 4 different sales as described in the Harvest Section of this Plan for the 2nd thinning.

No burning can be carried out due to smoke management concerns due to the Interstate Highway and Highway 51.

Activity Recommendations

Harvest

This Strata will be divided into three sales for future management.

Stand #13 and #16 for a total of 92.64 acres will be evaluated in 2019 for a possible thinning.

Stand #17 for a total of 100.22 acres will be evaluated in 2020 for a possible thinning.

Stands #1, #7 and #8 for a total of 142.03 acres will be evaluated in 2019 for a possible thinning.

These stands will be evaluated at that time and if a thinning is recommended, the MFC would mark the trees to be removed and then a sale could be held. All pulpwood and some of the chip-n-saw timber should be removed to achieve a basal area of 75 +/- 10 square feet per acre.

No prescribed burning can be carried out on this section due to smoke management concerns with Interstate 55 and Highway 51 and the towns of West and Vaiden Mississippi.

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Strata 2

Strata Description

This strata consists of the following stands: #5 , # 6 and # 9 for a total of 101.81 acres.

This strata consists of hardwood pulpwood and sawtimber and some scattered pine sawtimber that is located in the bottom drainages and is used as a SMZ. These hardwood trees of oaks, gums, maples and other species have an average age of 49 years established around 1962 and there are approximately 258 trees per acre with an average DBH of 13 inches with an average total height of 52 feet and approximately 60 tons per acre. The pines are old shortleaf established in 1985 and are scattered throughout on the ridge slopes of the SMZ. There are approximately 180 pines to the acre that average 13 inches in diameter with an average total height of 50 feet and has approximately 21 tons to the acre.

Strata Recommendations

This strata will be managed on a 65 year rotation. No actives are planned for the life of this plan. Wildlife such as deer, turkey and othe native wildlife use this area for food and cover. The hardwood timber and drainage provide excellent native wildlife habitat.

Activity Recommendations

Harvest

These 3 stands will need to be evaluated when strata 1 stands are schedulded for timber harvesting and all the old shortleaf and approximately 30 percent of the lower quality hardwood species will need to be removed through a selective thinning process at that time.

Stand #5 will need to be thinned in 2018 when Strata 1 stands are thinned.

Stands #6 and #9 will need to be thinned in 2021 when the remaining strata 1 stands are thinned.

The Mississippi Forestry Commission will mark the trees to be removed and conduct a timber sale for the BOE.

Strata 3

Strata Description

This strata consists of the following stand : # 12 for a total of 6.59 acres of hardwood pulpwood and sawtimber of mainly oaks, gums and other hardwood species that average 11 inches in DBH that are mainly located on a hill side. This hardwood stand was established in 1952 and now has approximately 149 trees per acre that average 52 feet in total height and has approximately 89 tons per acre.

This stand of hardwods provides cover and some food for the native wildlife.

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Strata Recommendations

This strata will be managed on a 65 year rotation . No activites are planned for the life of this plan. Native wildlife use this stara for food and cover. Oaks provide acrons and nesting areas.

Activity Recommendations

Strata 3 Harvest

This stand of hardwoods will need to thinned to lower the # of trees per acre. Approximately 35 percent of the trees per acre need to be removed. The Mississippi Forestry Commission will paint the trees that will need to be removed and conduct a timber sale for the harvesting. The sale will need to be held at the same time that strata 1 stands are thinned which is in 2019.

The thinning will allow more sunlight to reach the forest floor which will benifit the native wildlife by creating tender herbaceous vegetation.

Strata 4

Strata Description

This strata consists of the following stands : # 14 and # 15 for a total of 124.78 acres. This strata is a 14 year old pine plantation that is mainly pulpwood size timber with an average diameter of 6 inches and that has approximately 440 trees per acre with an average merchantable height of 30 feet tall with approximately 85 tons per acre. This is a natural stand of pines that were allowed to reforest the strata from a seed tree cut that ended in 1997. These trees are smaller in size than a planted stand of trees and will need to wait longer to be thinned than a planted stand of trees.

Stand Recommendations

This loblloly pine stand will be managed on a 35 year rotation using sound forestry managemement practices.

No burning can be carried out on this tract due to smoke management restrictions.

Activity Recommendations

Harvest

This Strata should be thinned to a BA of 75 +/- 10 square feet per acre in 2016. By selectively removing some of the pines, the thinning will allow more sunlight to reach the forest floor which in return will allow the remaining pines to grow much faster into sawtimber size trees.

Native wildlife will benefit from this thinning because of the new growth of herbaceous vegetation created by more sunlight reaching the forest floor.

No prescribe burning can be carried out due to Smoke Management concerns.

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OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

The property boundary line is painted around all 4 miles of the section of land in red paint at eye level mainly on hacked marks. and needs to re-painted approximately every 4 years.

Line Recommendations

The 4 miles of boundary lines will be repainted with red paint at eye level on the old hacked marks and all corners marked with a X during the summer of 2012.

Activity Recommendations

Property Activities

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

All property lines will be remarked with red paint during the summer of 2011.

Property Activities

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

All property lines will be remarked with red paint during the summer of 2016.

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West
2012 to 2021
658.60 Acres





Carroll County Schools - S16 T16N R5E

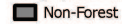
Property



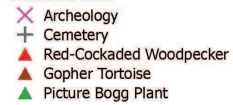
Category 1: Stands



Category 3: Non-Forest Stands



Restricted Sites



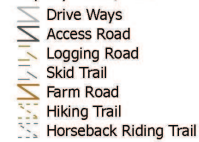
Structures



Structures (cont)



Property Roads/Trails



Boundary Lines



Boundary Lines (cont)



Management Compartment



Stand Activity Schedule for
Carroll County BOE
16 16N 5E

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2012					
1	1	Harvest, Mechanical, 1st Thin, Machine, Loblolly	127	\$642.62	\$27,310.08
1	4	Harvest, Mechanical, 1st Thin, Machine, Loblolly	72	\$811.06	\$15,489.33
1	7	Harvest, Mechanical, 1st Thin, Machine, Loblolly	2	\$19.48	\$372.02
1	8	Harvest, Mechanical, 1st Thin, Machine, Loblolly	5	\$54.84	\$1,047.24
1	10	Harvest, Mechanical, 1st Thin, Machine, Loblolly	11	\$122.06	\$2,331.03
1	11	Harvest, Mechanical, 1st Thin, Machine, Loblolly	8	\$92.67	\$1,769.78
1	13	Harvest, Mechanical, 1st Thin, Machine, Loblolly	91	\$1,024.77	\$19,570.79
1	16	Harvest, Mechanical, 1st Thin, Machine, Loblolly	2	\$22.52	\$430.08
1	17	Harvest, Mechanical, 1st Thin, Machine, Loblolly	100	\$506.00	\$21,504.00
Yearly Totals			418	\$3,296.01	\$89,824.36
2016					
4	14	Harvest, Mechanical, 1st Thin, Machine, Loblolly	97	\$3,395.00	\$17,200.04
4	15	Harvest, Mechanical, 1st Thin, Machine, Loblolly	27	\$957.60	\$4,851.48
Yearly Totals			124	\$4,352.60	\$22,051.52
2018					
1	4	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	72	\$2,520.00	\$41,472.00
2	5	Harvest, Mechanical, Thin, Machine, Loblolly	24	\$840.00	\$8,378.40
2	6	Harvest, Mechanical, Thin, Machine, Loblolly	20	\$685.65	\$6,838.87
2	9	Harvest, Mechanical, Thin, Machine, Loblolly	58	\$2,020.90	\$20,157.03
3	12	Harvest, Mechanical, Thin, Machine, Misc Hardwood	7	\$245.00	\$2,435.02

Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
			Yearlv Totals	180	\$6,311.55	\$79,281.32
2019						
1	8	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	5	\$170.45	\$2,805.12	
1	10	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	11	\$379.40	\$6,243.84	
1	11	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	8	\$288.05	\$4,740.48	
1	13	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	91	\$3,185.35	\$52,421.76	
1	16	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	2	\$70.00	\$1,152.00	
			Yearlv Totals	117	\$4,093.25	\$67,363.20
2020						
1	17	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	100	\$3,500.00	\$57,600.00	
			Yearlv Totals	100	\$3,500.00	\$57,600.00
2021						
1	1	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	127	\$4,445.00	\$73,152.00	
1	7	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	2	\$70.00	\$1,152.00	
4	15	Harvest, Mechanical, 2nd Thin, Machine, Loblolly	27	\$945.00	\$12,717.00	
			Yearlv Totals	156	\$5,460.00	\$87,021.00
			Grand Totals	1,095	\$27,013.41	\$403,141.40